AMENDMENTS TO THE CLAIMS

Claims 1-13 (canceled).

14. (Currently amended) A process for coating internals in a reactor, except for the coating of electrically heatable, at least partly open-cell foams, with a catalytically active material or a precursor thereof, in which an aerosol which contains the catalytically active material or the precursor thereof as a disperse phase is provided and the aerosol is passed through the reactor at a rate in the range from ~~0.1 to 10 m/s~~ 0.1 to 4 m/s, which is established so that the disperse phase of the aerosol is deposited on the internals in the reactor.

15. (Previously presented) A process as claimed in claim 14, wherein the aerosol is passed through the reactor at a velocity in the range from 0.2 to 4 m/s.

16. (Previously presented) A process as claimed in claim 14, wherein the disperse phase of the aerosol has a particle size of from 0.1 to 10 μm.

17. (Previously presented) A process as claimed in claim 14, wherein the aerosol is produced by dry comminution of a solid catalyst or of a precursor of a solid catalyst, to a particle size of from 0.1 to 10 μm metering and dispersing in an inert gas stream.

18. (Previously Presented) A process as claimed in claim 14, wherein the aerosol is produced by comminuting, by means of nozzles, a liquid which may have been heated or a liquid mixture, or a solution, suspension or emulsion which may have been superheated.

19. (Currently amended) A process as claimed in claim 14, wherein the internals are formed from moldings which are movable relative to one another and are ~~preferably~~ present in the form of a fixed bed, fluidized bed or moving bed.

20. (Previously presented) A process as claimed in claim 14, wherein the internals are present in the form of a consolidated, porous system.

21. (Previously presented) A process as claimed in of claim 14, which comprises internals having ordered flow channels.

22. (Previously presented) A process as claimed in claim 14, wherein the internals are pipes through which a heating medium is passed.

23. (Previously presented) A process as claimed in claim 14, wherein the disperse phase deposited on the internals in the reactor is subjected to further process steps.

24. (Previously presented) A process as claimed in claim 14, wherein the coating is an initial coating.

25. (Previously presented) A process as claimed in claim 14, wherein the coating comprises a reactivation of catalyst material on the surface of internals in a reactor.

26. (Previously presented) The process as claimed in claim 14 wherein the reactors are used for carrying out heterogeneous gas-phase reactions.

27. (Previously presented) A process as claimed in claim 15, wherein the aerosol is passed through the reactor and the velocity in the range from 0.2 to 2 m/s.

28. (Previously presented) A process as claimed in claim 16, wherein the disperse phase of the aerosol has a particle size of from 0.5 to 5 μm.

29. (Previously presented) A process as claimed in claim 17, wherein the solid catalyst has a particle size of from 0.2 to 5 μm and the inert gas stream is a nitrogen stream.

30. (Previously presented) A process as claimed in claim 20, wherein the consolidated, porous system is woven fabric, knitted fabric, braid or foam; except for electrically heatable foams.

31. (Previously presented) A process as claimed in claim 21, wherein the internals are stacked packings or monoliths.

32. (Previously presented) A process as claimed in claim 22, wherein the pipes are ribbed pipes.

33. (Previously presented) A process as claimed in claim 23, wherein the disperse phase deposited on the internals in the reactor is further fixed, activated and/or calcined.

34. (Previously presented) A process as claimed in claim 26, wherein the heterogeneous gas-phase reactions are oxidation or hydrogenation reactions.

35. (Previously presented) A process as claimed in claim 34, wherein the oxidation or dehydrogenation reactions are synthesis of maleic anhydride, phthalic anhydride, acrolein, (meth)acrylic acid or ethylene oxide.

36. (New) A process as claimed in claim 27, wherein the disperse phase of the aerosol has a particle size of from 0.5 to 5 μm.